#### **BRIEFING/POINT PAPER**

# The Uniformed Services University of the Health Sciences (USUHS)

The Department takes great pride in the fact that the USUHS graduates have become the backbone for our Military Health System. The training they receive in combat and peacetime medicine is essential to providing superior force health protection and improving the quality of life for our service members, retirees, and families. All of us in the Office of the Secretary of Defense place great emphasis on the retention of quality physicians in the military. The USUHS ensures those goals are met (The Honorable Donald Rumsfeld, Secretary of Defense, Letter to the Chairman of the USUHS Board of Regents, March 22, 2001).

**MISSION.** The Uniformed Services Health Professions Revitalization Act of 1972, Public Law 92-426, established the Uniformed Services University of the Health Sciences (USUHS) to provide *Continuity* and *Leadership* for the Military Health System (MHS). Secretaries of Defense, the Honorable William S. Cohen and the Honorable Donald Rumsfeld, have recognized USUHS for its mission accomplishment and cost-effective provision of multiple products for the MHS.

### The University - Three Core Values.

### RELEVANCE.

The Uniformed Services University of the Health Sciences distinguished itself by exceptionally meritorious service from July 1, 1990 to July 1, 2000. The University has graduated military physicians with better overall understanding of the military, a greater commitment to the military, and a better preparation for operational assignments and leadership positions" (Citation, Joint Meritorious Unit Award, presented to USUHS by the Honorable William S. Cohen, Secretary of Defense, December 11, 2000).

USUHS products, programs and expertise ensure the University's response to the special needs of the MHS through the following:

- The recruitment and retention of uniquely qualified uniformed physicians, advanced practice nurses and scientists;
- The development and sharing of unique health care expertise and continuously evolving curricula interwoven with military applications essential for the response to weapons of mass destruction (WMD), disaster or humanitarian assistance, and contingencies other than war. The sharing of this unique training and expertise has been enhanced through the USUHS National Capital Area Medical Simulation Center, the USUHS Patient Simulation Laboratory, and the University's internationally recognized research centers and programs;
- The recognition of USUHS by the Association of American Medical Colleges (AAMC) as the "one place where physicians of tomorrow do get thorough preparation to deal with many contingencies, including the medical aspects of chemical and biological terrorism. USUHS students learn how nuclear, biological, and chemical agents act on the human body and what to do in the event of a suspected exposure" (AAMC Reporter, December Issues of 1998 and 2001).

#### READINESS.

USUHS is the **only** University in the United States dedicated to ensure readiness for the MHS. Its military unique curricula and programs, successfully grounded in a multi-Service environment, draw upon lessons learned during past and present-day combat and casualty care to produce **career-oriented officers** - physicians, advanced nurses, and scientists with military unique expertise. USUHS graduates receive military medical and readiness training **BEFORE** they become critical to the MHS as health care providers. USUHS ensures force health protection and readiness through the following:

- USUHS alumni provide extraordinary dedication, leadership and retention rates which ensure the provision of continuity for the MHS mission and the essential safeguarding of lessons learned during combat and casualty care;
- Since the first graduating class in 1980, through the present, almost 83 percent of all USUHS graduates remain on active duty in the MHS; the USUHS SOM graduate serves, on average, over 18.5 years on active duty in the MHS;
- Over 2,700 USUHS School of Medicine (SOM) graduates represent 22 percent of the approximately 11,833 physicians on active duty in the MHS;
- The median length of non-obligated service for physician specialists in the MHS, not including USUHS graduates is 2.9 years; the median length of non-obligated service for USUHS physicians is 9 years.
- Approximately one out of every two USU SOM alumni who have completed their residency training is holding a leadership or operational position in the MHS.
- The General Accounting Office has documented that "43 out of 44 commanders of major military medical units perceived that physicians from USUHS have a greater overall understanding of the military, greater commitment to the military, better preparation for operational assignments, and better preparation for leadership roles..." In addition, USUHS' military unique training includes "approximately between 784 and 889 hours of initial military education and medical readiness training compared to that provided to the Health Professions Scholarship (HPSP) graduates whose training ranges from 50 to 132 hours" (General Accounting Office Report, "Military Physicians DoD's Medical School and Scholarship Program," September 29, 1995, pages 55, 41, and 43).
- The USUHS SOM has consistently provided the majority of physicians who serve in the Special Forces; "I do have 14 physicians who work in Special Forces. Nine out of the 14 are USUHS graduates, that says they are ready for that kind of activity" (Surgeon General of the Army's statement to the Senate Committee on Armed Services, March 2, 1994).

### **OPTIMIZATION.**

Since 1977, continuous accreditation granted by the Commission on Higher Education of the Middle States Association of Colleges and Schools enables the University to support and generate cost avoidance for the MHS through its multiple educational programs that are accredited by 14 independent accrediting entities.

### USUHS - The Academic Center for Uniformed Medicine.

- The University has granted over 3,268 Medical Degrees; 170 Masters of Science in Nursing Degrees; and 715 Masters and Doctorates through its Graduate Education Programs.
- USUHS has 329 full time faculty (209 civilians/120 uniformed officers) and 3,989 off-campus faculty (1,195 civilians/2,794 uniformed officers).

- "USUHS not only educates its own graduates, but also provides a significant national service through its continuing medical education courses for military physicians in combat casualty care, tropical medicine, combat stress, disaster medicine, and medical responses to terrorism. These courses are simply **not available** through civilian medical schools" (American Medical Association Statement to the Senate Appropriations Committee, April 14, 1994).
- The USUHS Office of Graduate Medical Education (GME) was established in 1986 to provide consultation on GME programs (internship, residency, and fellowship training for physicians) for Program Directors and the Office of the Assistant Secretary of Defense for Health Affairs (ASD/HA). In 1993, the ASD/HA directed the integration of duplicate GME programs in the National Capital Region. In accordance with that directive, the National Capital Consortium (NCC) was established by the Commanding Officers of the Walter Reed Army Medical Center, the National Naval Medical Center, the Malcolm Grow Medical Center, and the Dean of the USUHS SOM on January 25, 1995. In September of 1997, the USUHS Office of GME was selected as the Administrative Office for the NCC; when this delegation of authority took place, there were 25 programs under the NCC sponsorship. As of December 31, 2001, 55 integrated GME programs were under the NCC. On June 28, 1999, the ASD/HA assigned USUHS with the responsibility for coordinating the efforts of the Services in developing the necessary curricula (for military unique training in DoD-sponsored GME programs) and for establishing a centralized repository of information on educational materials and courses to support the implementation of those curricula. The USUHS Office of GME provides cost-effective support by serving as a significant academic component in the development of the medical expertise of residents throughout the MHS.
- Following the identification of a requirement for advanced nurse practitioners and anesthetists by the Federal Nursing Chiefs, in 1993, Congress directed the initiation of a demonstration program for the preparation of nurse practitioners for the MHS within the unique educational environment of USUHS; this eventually led to the establishment of the USUHS Graduate School of Nursing (GSN). The GSN received official approval from the Office of the Secretary of Defense on February 26, 1996. Significantly, the GSN has received full accreditation from the National League for Nursing (NLN) Accrediting Commission through the Fall of 2009 and the American Association of Colleges of Nursing (AACN) Commission on Collegiate Nursing Education (CCNE) through June of 2012. The Federal Nursing Chiefs informed both the NLN and the CCNE site visitors that they were most pleased with the excellent quality of the students who graduate from the GSN and that the USUHS GSN has proven to be a unique educational asset for the MHS. In addition, the GSN has responded to the special requirements of the Federal Nursing Chiefs by the recent implementation of a Clinical Nurse Specialist Program; and, currently, in response to Congressional direction and the Federal Nursing Chiefs, the GSN is developing a Doctoral Program.
- The USUHS Office of Research (REA) provides service to three communities: the University as an institution, USUHS faculty and student investigators, and more than 80 funding organizations that support research at USUHS. The 2001 USUHS student research programs supported the work of 9 SOM students, 32 GSN students, and 28 candidates in the Ph.D. or Dr.P.H. Graduate Education Programs. Over \$30 million of Congressionally funded research programs were provided administrative support by REA: the TriService Nursing Research Program; the Center for Prostate Disease Research; the Defense Brain and Head Injury Program; the United States Military Cancer Institute; a Coronary Artery Disease Reversal Program; the Clinical Breast Care Program; and, the New Program for Post-Polio Research. Extramurally funded research at USUHS included 330 projects supported by various Federal agencies such as the National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Energy (DOE), the U.S. Army Medical Research and Materiel Command (MRMC), and the Office of Naval Research (ONR). The USUHS Program for the Protection of Human Participants in Research and the USUHS Institutional Review Board (IRB) jointly ensure the protection of human volunteers during research conducted at USUHS and its affiliates. In 2001, the USUHS IRB, supported by REA, reviewed and approved the following: 211 initial proposals for human subject research; 120 amendments to protocols already underway; and, 119 annual or semi-annual reviews of previously approved projects. The USUHS Program for the Protection of Human Participants in Research and the USUHS IRB have been found to meet, or exceed, all governing standards and regulations by external auditors.

### Generation of Cost Avoidance for the MHS.

Four USUHS programs generated \$24.6 Million of cost avoidance for the MHS in Fiscal Year 2002:

- 153 USUHS faculty members, 102 uniformed officers and 51 civilians, provided 141,842 hours of clinical and consultative services in Military Treatment Facilities at an estimated manpower cost of \$10,254,109;
- The USUHS Office of Continuing Education for Health Professionals (CHE), through unique accreditation by five entities, sponsored continuing medical education for 499 activities with an attendance of 4,072 physicians; provided continuing nursing education for 52 activities with an attendance of 2,458 nurses; and, approved 17 Category II (non-ACHE) continuing education credit for 592 members of the American College of Healthcare Executives with an estimated cost avoidance of \$1,861,865;
- The USUHS Military Training Network (MTN) develops and implements policy guidance and ensures compliance with curriculum and administrative standards for resuscitative and trauma medicine training programs for the MHS and DoD affiliates; during the past year, MTN fulfilled is mission and realized the following training totals: Basic Life Support (Instructor-Trainer, Instructor, Provider, Heartsaver CPR, Heartsaver AED) was provided to 152,853 DoD personnel; Advanced Cardiac Life Support (Instructor, Provider) provided training for 9,970 individuals; Pediatric Advanced Life Support (Instructor, Provider) provided training for 4,293; and Advanced Trauma Life Support provided training to 1,560 individuals and 10,474 instructors were updated with AHA Guidelines 2000. A total of 179,150 defense personnel were trained through the USUHS MTN; the estimated total cost avoidance generated for DoD was \$11,424,909; and,
- The USUHS SOM Graduate Education Programs have been established from within existing resources at the University, to specifically respond to the special needs of the Uniformed Services. During 2002, 35 uniformed officers received advanced degrees (30 Master's Degrees and 5 Doctorates); at an average cost of \$30,000 per advanced degree, the USUHS SOM Graduate Education Programs generated approximately \$1,050,000 of cost avoidance for the DoD.

# Four USUHS Activities Provide Critical WMD-Related Expertise.

Four USUHS Activities have established credibility in providing military unique expertise covering four areas of WMD-related concerns: the preparation of emergency responder communities; ensuring communication and assessment of military medical humanitarian assistance training for the MHS; addressing traumatic stress of both civilian and military communities during WMD-related incidents; and, the development of medical radiological countermeasures and the provision of unique training for the response to radiological emergencies.

### USUHS CASUALTY CARE RESEARCH CENTER

- Preparing Uniformed and Civilian Emergency Responders. Established in 1989, the USUHS Casualty Care Research Center (CCRC) has provided military-unique, national standard, assessment-driven curricula and certification for over 6,000 emergency responders from more than 750 agencies across the United States on the crisis management response to: weapons of mass destruction; counter terrorism; protective operations; hostage rescue; explosive ordnance disposal; and, major national security events. In addition, the CCRC has coordinated joint civil-military interoperability response plans and initiated individual programs for civilian hospitals to ensure continuity of WMD training for future staff; a distance learning program is currently under consideration. Following the events of September 11, 2001, the CCRC Mission Support Center has had an increasing frequency of requests for consultative support in the areas of crisis management and special operations experience relevant to military medicine. The CCRC has served DoD well as a bridge between the DoD, other Federal agencies, and the civilian emergency communities.

### USUHS CENTER FOR DISASTER AND HUMANITARIAN ASSISTANCE MEDICINE

- Ensuring Communication, Effective Measurement, Rapid Assessment and the Provision of Military Medical Humanitarian Assistance Training Throughout the MHS and Civilian Medical Communities. Since 1999, the USUHS Center for Disaster and Humanitarian Assistance Medicine (CDHAM) has served as a military-unique focal point/clearing house for the MHS for new developments in the areas of disaster and humanitarian assistance medicine. CDHAM personnel conduct studies for the MHS to measure the effectiveness of Military Medical Humanitarian Assistance (MMHA) and to provide rapid assessment of Disaster and Humanitarian Assistance requirements. CDHAM has developed and distributed MMHA Courses covering eleven specialties. In addition, CDHAM provides military unique curricula for the MHS and civilian residency programs, the development of ultrasound imaging training for disaster response, and MMHA support to four regional Unified Combatant Commands. At this time, the CDHAM personnel are expanding collaborative relationships with the United States Northern Command and Mexico.

# USUHS CENTER FOR THE STUDY OF TRAUMATIC STRESS

Addressing Traumatic Stress During a National Crisis. The USUHS Center for the Study of Traumatic Stress (the Center) was established in 1987 as a center of excellence for responding to DoD's long-term concerns over the substantial health risks resulting from the traumatic impact of the possibility or actual use of WMD during acts of terrorism or hostage events; combat, peacemaking, peacekeeping or operations other than war; natural disasters such as hurricanes, tornadoes, or floods; and, more common stress-producing events such as physical assaults and motor vehicle, shipboard, or airplane accidents. The Center has earned both national and international recognition and coordinates seminars, collaborates on significant publications, and is recognized in the area of traumatic stress by the National Media. Since the events of September 11, 2001, the Center has ensured the continued provision of critically required military-unique, medical expertise and consultative support relevant to WMD-related, crisis management, disaster response, and homeland defense. Requests for assistance have been received from the Secretaries of Defense (membership on a 12-member Task Force, RED-NUFF) and Health and Human Services (Planning for Biological Events: Responses to Terrorism and Infectious Disease Outbreaks - a three-day conference held on October 19-21, 2001; in early 2002, a comprehensive summary was published by the Center).

# ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE

Emergency Response, and Consultation. Since 1961, the Armed Forces Radiobiology Research Institute (AFRRI) has studied the biological effects of ionizing radiation for the development of medical countermeasures and rapid assessment of exposure doses to provide the most effective medical management for radiation injuries. AFRRI has trained thousands of MHS personnel on the medical effects of ionizing radiation. The Medical Radiobiology Advisory Team is uniquely qualified to respond to radiological emergencies due to warfare, accident, or terrorism. AFRRI's physicians and health physicists serve as consultants to the Joint Chiefs of Staff (J-4 Medical), Office of the Secretary of Defense (Nuclear Matters), Combatant Commanders and their Surgeons, the Surgeons General, and others. AFRRI provides consultation to Health and Human Services on medical planning and consequence management of nuclear/radiological catastrophe and works closely with the National Pharmacy Stockpile to update the formulary for radioprotective/radiotherapeutic drugs. Most recently, AFRRI was instrumental in developing the radiation dose standard for the neutralization of anthrax-contaminated mail and restarting the delivery of mail service for the Nation.

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The examples cited above are **not** an inclusive reflection of all of the University's many products and services.

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